with matching availability of resources can be planned and assured at the time of taking up of the project. In case of the Railway projects, the plan size is determined annually and as such, no estimation of cost and time overrun is feasible. Moreover, Railways have a heavy throw-forward of ongoing projects requiring over Rs. 44000 crore for their completion. The resources are limited and projects are being progressed as per the availability of resources. There has been increase in cost of projects due to general escalation and in some cases due to upgradation of standards of construction in the intervening period.

(c) and (d) The works are being progressed as per the availability of resources. Railways have taken a number of initiatives to get additional resources from sources other than the normal budgetary support which would expedite the progress of the projects.

CSIR techniques

1987. SHRI R.P. GOENKA: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) what are the various technologies developed by CSIR in the last decade;

(b) how many of them have been patented/applied for patents during these years; and

(c) how many of them have been deployed commercially?

THE MINISTER OF STATE IN THE DEPARTMENT OF SCIENCE AND TECHNOLOGY IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BACHI SINGH RAWAT): (a) CSIR has developed over 1500 technologies during the last decade (i.e. from 1993-1994 to 2002-2003) which are in the areas of Aerospace, Biology & Biotechnology, Chemicals, Drugs & Pharmaceuticals, Electronics and Instrumentation, Energy, Food & Food Processing, Housing and Construction, Leather, Machinery & Equipment and Minerals, Metals & Materials.

(b) CSIR PATENTS FILED AND GRANTED DURING LAST DECADE

Year	India		Foreign	
	Filed	Granted	Filed	Granted
1993-94	198	80	17	12
1994-95	241	104	29	10
1995-96	260	106	58	14
1996-97	209	92	70	15
1997-98	264	155	94	24
1998-99	310	134	112	38
1999-2000	377	112	199	35
2000-2001	410	117	452	56
2001-2002	410	341	580	86
2002-2003	421	166	728	189
TOTAL	3100	1407	2339	479

(c) During the period over 326 patents have been licensed and 224 patents have been commercialized.

Investment on R&D by companies

1988. SHRI R.S. GAVAI : Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether it is a fact that 86 per cent of Indian companies invest nothing on Research and Development;

(b) if so, the reasons therefor;

(c) whether Government propose to make it mandatory for companies to spend some of the profits of the companies on Research and Development;

(d) if so, the details thereof; and